National Weather Service
Storm Data and Unusual Weather Phenomena

February 2005

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
IOWA, Central									
Polk County									
Des Moines	**20**	**0527CST**			**0**	**0**	**1K**		**Hail(1.00)**
Polk County									
3.5 SSE Des Moines	**20**	**0530CST**			**0**	**0**	**3K**		**Hail(1.50)**
Polk County									
4 S Des Moines	**20**	**0530CST**			**0**	**0**	**1K**		**Hail(1.00)**
Polk County									
Des Moines	**20**	**0535CST**			**0**	**0**			**Hail(0.75)**
Polk County									
Pleasant Hill	**20**	**0535CST**			**0**	**0**			**Hail(0.75)**
Polk County									
3 NE Des Moines	**20**	**0544CST**			**0**	**0**			**Hail(0.88)**

Low pressure tracked across Kansas into northern Missouri, along the Iowa-Missouri border. A strong warm front extended east from the low, but remained south of Iowa. The dry slot lifted northeast across the state during the pervious evening. A strong vorticity maximum lifted northeast out of the southern Plains overnight. Strong warm air advection in conjunction with the approaching vorticity maximum lead to elevated convection during the predawn hours. Analysis of the soundings in the near storm environment indicated the lifting took place from 703 mb. CAPE values from this level were around 316 J/kg in an environment that contained a 0-3 km helicity value of 362 m**2/s**2. Thunderstorms erupted in central Iowa and intensified quickly. They dropped three quarter to one inch diameter hail for a brief period before weakening. One and one half inch diameter hail fell on the south side of the city of Des Moines for the largest hail report received.